

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A battery apparatus having a case having a width, a thickness and a length; a battery cell disposed at the inside of said case; and a battery-side terminal disposed at a surface of said case and connected to a chargeable battery section, said battery apparatus comprising:

three or more engaging pieces at portions on both sides in a width direction of said case which extend in said length direction while projecting outwardly in said width direction, said three or more engaging pieces configured to engage engaging claws of a battery mounting section of an electronic device and position said case at a position in a thickness direction of said case at said battery mounting section, said three or more engaging pieces disposed at spaced intervals in a length direction; and

a convex portion projecting in the length direction from an end surface of the case and extending in the width direction along the end surface of the case, the convex portion disposed at a distance in the thickness direction from the battery-side terminal.

Claim 2 (Previously Presented): The battery apparatus as claimed in claim 1, wherein said battery-side terminal is provided at an end portion of said case in said length direction, two of said plurality of engaging pieces are provided on said case at a portion nearer the end portion in said length direction, and another one of the engaging pieces are provided at a portion close to the engaging piece provided nearer the end portion of said case where said battery-side terminal is located.

Claim 3 (Previously Presented): The battery apparatus as claimed in claim 1, wherein in a condition in which the battery apparatus is attached to said battery mounting section,

movement of said battery apparatus toward said mounting surface is restricted by mating the bottom surface of said case with the mounting surface of said battery mounting section, and movement of the battery apparatus in the direction away from the mounting surface is restricted by engaging the engaging pieces with the engaging claws.

Claim 4 (Previously Presented): The battery apparatus as claimed in claim 1, wherein said case includes a main body portion extending in the length direction with a uniform size in said width direction, and a bottom portion provided at one of thickness directions at a central portion in the width direction of said main body portion and extending in said length direction with a smaller width size than the width of said main body portion, said bottom surface is formed with a surface of said bottom portion, said plurality of engaging pieces are formed by projecting from said bottom surface portion at the both sides in said width direction, a plurality of concave portions extending in said length direction are formed by said respective engaging pieces; side surfaces of said bottom surface positioned at both sides in said width direction; and a surface where said main body portion is facing the side surface of the bottom surface, and each of said respective engaging claws engages with said engaging piece by being inserted into each of said concave portion.

Claim 5 (Currently Amended): The battery apparatus as claimed in claim 4, wherein a second convex portion projecting outwardly in said width direction is provided at a side face of the bottom portion where at least two of the engaging pieces among the plurality of engaging pieces are positioned, and said second convex portion is formed with a smaller projecting size than said engaging piece.

Claim 6 (Previously Presented): The battery apparatus as claimed in claim 4, wherein at least one of said plurality of concave portions includes a stopper barrier for blocking an end portion in the length direction of the concave portion.

Claim 7 (Previously Presented): The battery apparatus as claimed in claim 1, wherein said engaging pieces are provided at both side portions in the width direction at the bottom surface of said case.

Claim 8 (Currently Amended): An electronic device having a battery mounting section on which a battery apparatus is attached, wherein said battery apparatus includes a case having a width, a thickness and a length; a battery cell housed in the inside of said case; a bottom surface positioned at one side in a direction of said thickness of said case; and a battery-side terminal disposed at a surface of said case and electrically connected to said battery cell, three or more engaging pieces extending in a direction of said length while projecting outwardly in a direction of said width are disposed at regular intervals in said length direction at portions on both sides in said width direction of the case, and a convex portion projecting in the length direction from an end surface of the case and extending in the width direction along the end surface of the case, the convex portion disposed at a distance in the thickness direction from the battery-side terminal, said battery mounting section comprising:

a mounting section-side terminal making contact with said battery-side terminal; ~~and~~

a mounting surface with which said bottom surface is mated, said mounting surface has a width of a dimension corresponding to the width of said case, and a length of a dimension greater than the length of said case, and at portions on both sides in a width direction of said mounting surface on a mounting surface of said battery mounting section

engaging claws configured to engage said engaging pieces and to position a position of said case in the thickness direction on said mounting surface by matching the width direction and the length direction of said case with the width direction and the length direction of said mounting surface, and to mate the bottom surface of said case with said mounting surface are disposed in the number corresponding to that of said engaging pieces; and

a recess groove configured to receive the convex portion of the battery when the battery is mounted in the battery mounting section.

Claim 9 (Previously Presented): The electronic device as claimed in claim 8, wherein said battery-side terminal is provided at an end portion of said case in said length direction, two of said plurality of engaging pieces are provided at a portion nearer the end portion of said case in said length direction, another one of the engaging pieces is provided at a portion close to the engaging piece provided nearer the end portion of said case where said battery-side terminal is located, said mounting section-side terminal is provided at an end portion of said mounting surface in said length direction, two of said plurality of engaging claws are provided at a portion nearer the end portion of said mounting surface in the length direction, and another one of the engaging claws is provided at a portion close to the engaging claw provided nearer the end portion of said mounting surface where the battery-side terminal is located.

Claim 10 (Previously Presented): The electronic device as claimed in claim 8, wherein movement of said battery apparatus toward said mounting surface is restricted by mating the bottom surface of said case with the mounting surface of said battery mounting section, and movement of the battery apparatus in a direction away from the mounting surface is restricted by engaging the engaging pieces with the engaging claws.

Claim 11 (Previously Presented): The electronic device as claimed in claim 8, wherein said case includes a main body portion extending in the length direction with a uniform size in said width direction, and a bottom portion provided at one of thickness directions at a central portion in the width direction of said main body portion and extending in said length direction with a smaller width size than the width of said main body portion, said bottom surface is formed with a face of said bottom portion, said plurality of engaging pieces are formed by projecting from said bottom surface portion at the both sides in said width direction, a plurality of concave portions extending in said length direction are formed by said respective engaging pieces; side surfaces of said bottom surface positioned at both sides in said width direction; and a surface where said main body portion is facing the side surface of the bottom surface, and said engaging claws engage with said engaging piece by being inserted into each of said concave portion.

Claim 12 (Currently Amended): The electronic device as claimed in claim 11, wherein a second convex portion projecting outwardly in said width direction is provided at a side face of the bottom portion where at least two of the engaging pieces among the plurality of engaging pieces are positioned, said second convex portion is formed with a smaller projecting size than said engaging piece, and in a condition where said engaging claw engages with said engaging piece, said engaging claw and said second convex portion are in contact so that the position of the battery apparatus in the width direction of the case is determined in said battery mounting section.

Claim 13 (Previously Presented): The electronic device as claimed in claim 11, wherein at least one of said plurality of concave portions includes a stopper barrier for blocking an end portion in the length direction of the concave portion.

Claim 14 (Previously Presented): The battery apparatus as cited in claim 1, wherein the battery-side terminal is provided at an end portion in the length direction of a bottom portion, and the convex portion extends in the width direction above the battery-side terminal.

Claim 15 (Previously Presented): The battery apparatus as cited in claim 1, further comprising:

an identification portion including a recess having a size based on an electrical characteristic of the battery, the recess configured to receive a projection of the battery mounting section having a size based on a desired electrical characteristic for the electronic device, where the electrical characteristic is at least one of a capacity, a suitable charging current value, and a possibility of quick charge of the battery apparatus.

Claim 16 (Previously Presented): The battery apparatus as cited in claim 1, further comprising:

an identification portion including a projection having a size based on an electrical characteristic of the battery, where the electrical characteristic is at least one of a capacity, a suitable charging current value, and a possibility of quick charge of the battery apparatus.

Claim 17 (Currently Amended): A battery apparatus having a case having a width, a thickness and a length; a battery cell disposed at the inside of said case; and a battery-side terminal disposed at a surface of said case and connected to a ~~said~~ chargeable battery section, said battery apparatus comprising:

three or more engaging pieces at portions on both sides in a width direction of said case which extend in said length direction while projecting outwardly in said width direction,

said three or more engaging pieces configured to engage claws of a battery mounting section and position said case at a position in a thickness direction of said case at said battery mounting section, said three or more engaging pieces disposed at spaced intervals in a length direction, wherein a cutout portion is formed in an end of a bottom portion of the case, the cutout portion configured to receive a locking device of the battery mounting section; and

a convex portion projecting in the length direction from an end surface of the case and extending in the width direction along the end surface of the case, the convex portion disposed in a distance in the thickness direction from the battery-side terminal.

Claim 18 (Currently Amended): The battery apparatus as cited in claim 17, wherein the battery-side terminal is provided on a surface of the case at an ~~opposite~~ end portion of the case in the length direction of the ~~bottom portion~~ case.

Claim 19 (Canceled).

Claim 20 (Previously Presented): The battery apparatus as cited in claim 17, wherein the bottom portion also includes a recess portion.

Claim 21 (Currently Amended): The battery apparatus as cited in claim 20, further comprising:

a second convex portion in the recess portion; and

a machine name plate located in the recess portion and including a positioning groove receiving the convex portion of the recess portion.

Claim 22 (Previously Presented): The battery apparatus as cited in claim 17, further comprising:

an identification portion including a recess having a size based on an electrical characteristic of the battery, the recess configured to receive a projection of the battery mounting section having a size based on a desired electrical characteristic for the electronic device, where the electrical characteristic is at least one of a capacity, a suitable charging current value, and a possibility of quick charge of the battery apparatus.

Claim 23 (Previously Presented): The battery apparatus as cited in claim 17, further comprising:

an identification portion including a projection having a size based on an electrical characteristic of the battery, where the electrical characteristic is at least one of a capacity, a suitable charging current value, and a possibility of quick charge of the battery apparatus.

Claim 24 (Currently Amended): A battery apparatus having a case having a width, a thickness and a length; a battery cell disposed at the inside of said case; and a battery-side terminal disposed at a surface of said case and connected to said chargeable battery section, said battery apparatus comprising:

three or more engaging pieces at portions on both sides in a width direction of said case which extend in said length direction while projecting outwardly in said width direction, said three or more engaging pieces configured to engage claws of said battery mounting section and position said case at a position in a thickness direction of said case at said battery mounting section, said three or more engaging pieces disposed at spaced intervals in a length direction, wherein a bottom portion of the case includes a recess portion, the recess portion including a first convex portion; and



a second convex portion projecting in the length direction from an end surface of the case and extending in the width direction along the end surface of the case, the second convex portion disposed in a distance in the thickness direction from the battery-side terminal.

Claim 25 (Currently Amended): The battery apparatus as cited in claim 24, further comprising:

a machine name plate located in the recess portion and including a positioning groove receiving the first convex portion of the recess portion.

Claim 26 (Previously Presented): The battery apparatus as cited in claim 24, wherein an end of the bottom portion of the case includes a cutout portion, the cutout portion configured to receive a locking device of the battery mounting section.

Claim 27 (Currently Amended): The battery apparatus as cited in claim 26, wherein the battery-side terminal is provided at an ~~opposite~~ end portion of the case in the length direction of the case ~~bottom portion~~.

Claim 28 (Canceled).

Claim 29 (Previously Presented): The battery apparatus as cited in claim 24, further comprising:

an identification portion including a recess having a size based on an electrical characteristic of the battery, the recess configured to receive a projection of the battery mounting section having a size based on a desired electrical characteristic for the electronic

device, where the electrical characteristic is at least one of a capacity, a suitable charging current value, and a possibility of quick charge of the battery apparatus.

Claim 30 (Previously Presented): The battery apparatus as cited in claim 24, further comprising:

an identification portion including a projection having a size based on an electrical characteristic of the battery, where the electrical characteristic is at least one of a capacity, a suitable charging current value, and a possibility of quick charge of the battery apparatus.

Claim 31 (New): The battery apparatus as cited in claim 1, wherein the convex portion is located on a same end surface of the case as the battery-side terminal and extends in the width direction of the case a distance greater than a distance that the electrodes of the battery-side terminal extend in the width direction of case.

Claim 32 (New): The battery apparatus as cited in claim 17, wherein the convex portion is located on a same end surface of the case as the battery-side terminal and extends in the width direction of the case a distance greater than a distance that the electrodes of the battery-side terminal extend in the width direction of case.

Claim 33 (New): The battery apparatus as cited in claim 24, wherein the second convex portion is located on a same end surface of the case as the battery-side terminal and extends in the width direction of the case a distance greater than a distance that the electrodes of the battery-side terminal extend in the width direction of case.